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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/542,681	04/03/2000	Curtis M. Pleiss	M-8379US	4600

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MACPHERSON KWOK CHEN & HEIDI LLP  
1762 TECHNOLOGY DRIVE  
SUITE 226  
SAN JOSE, CA 95110

EXAMINER

TRAN, THANG V

ART UNIT PAPER NUMBER

2653

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/542,681

Applicant(s)

PLEISS ET AL.

Examiner

Thang V. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

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The amendment dated 02/17/05 has been considered with the following result:

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-10 and 36 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is unclear where the specification contains a description of a plurality of the active bits and the inactive bits encoding an information field as now recited in the instant claimed invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-10 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1:

The claims recites that a plurality of the active bits and the inactive bits encoding an information field. Accordingly, it is unclear as to how the plurality of the active bits and the inactive bits encodes an information field.

Claims 9-10 and 36 falls with their respective parent claim 1.

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5. Due to the 35 U.S.C. 112 problems indicated above, the limitation “a plurality of the active bits and the inactive bits encoding an information field” will not be read into the claimed invention for the purpose of determination of the claim allowability at this time.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-3, 5-10 and 36 are rejected under 35 U.S.C. 102(a) as being anticipated by Asano (EP 969 452 A1) cited by Applicant.

Regarding claim 1, see Figs. 2 and 6 of Asano which show a spiral groove (track or groove) in an optical disk comprising: a wobble (1) which is a sinusoidal deviation from the centerline of the groove; and a first plurality of sinusoidal marks (2) located at zero-crossings of the wobble (1), each sinusoidal mark (2) being formed from a sinusoidal deviation of the groove; wherein the presence of one of the first plurality of sinusoidal marks (2) at one of the zero-crossing represents an active bit and the absence of one of the first plurality of sinusoidal marks (2) at one of the zero crossings represents an inactive bit, a plurality of the active bits and the inactive bits representing an information field (see Fig. 6A).

Regarding claim 2, see Fig. 11A which shows the plurality of sinusoidal marks has the same amplitude as the wobble.

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Regarding claim 3, see Fig. 2 which shows a sinusoidal mark (2) has a period shorter than that of the wobble (1). Accordingly, the sinusoidal mark has a frequency greater than the frequency of the wobble based on the period.

Regarding claim 5, see Fig. 15A which shows a second plurality of sinusoidal marks located at a zero crossings of the wobble having a different phase than the first plurality of sinusoidal marks.

Regarding claims 6-10, see Fig. 2 and 11A which show a plurality of first and second sinusoidal marks located adjacent to each other at zero crossings and the second plurality of sinusoidal marks located at zero crossing of the wobble having the same phase as the first plurality of sinusoidal marks.

Regarding claim 36, see Fig. 6A.

8. Claims 1,3, 5-10 and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Asano et al (US 6,621,772)

Regarding claim 1, see Figs. 9-14C and 34 Asano et al. which show a spiral groove (3, 4) in an optical disk (see Fig. 9) comprising: a wobble (351) which is a sinusoidal deviation from the centerline of the groove; and a first plurality of sinusoidal marks (see marks in Fig. 11 or 34) located at zero-crossings of the wobble, each sinusoidal mark being formed from a sinusoidal deviation of the groove (see marks Fig. 11 or 34); wherein the presence of one of the first plurality of sinusoidal marks at one of the zero-crossing represents an active bit and the absence of one of the first plurality of sinusoidal marks at one of the zero crossings represents an inactive bit, and a plurality of the active bits and the inactive bits representing an information field (see Fig. 14).

Regarding claim 3, see column 21, lines 40-43, which disclosed that the sinusoidal mark (20) has a frequency greater than the frequency of the wobble 351.

Regarding claim 5, see Fig. 11 which shows a second plurality of sinusoidal marks located at a zero crossings of the wobble having a different phase than the first plurality of sinusoidal marks.

Regarding claims 6-10, see Fig. 34 which show a plurality of first and second sinusoidal marks(20) located adjacent to each other at zero crossings and the second plurality of sinusoidal marks located at zero crossing of the wobble having the same phase as the first plurality of sinusoidal marks.

Regarding claim 36, see Fig. 14A-14C.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Asano (EP 0969 452 A1) or Asano et al (US 6,621,772).

Asano, according to Fig. 2, and Asano et a., according to Figs. 9-14C and 34, each shows all the feature of the instant claimed invention (see the rejections above) except for the use of sinusoidal marks having frequency 3 to 5 times the frequency of the wobble as further recited in claim 4. However, both Asano and Asano et al do suggest the use of a higher frequency for sinusoidal marks as compared to a frequency of the wobble in order to easily detect the

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sinusoidal marks. Thus, selecting a frequency 3 to 5 time the frequency of the wobble is considered merely a selection of alternative and within the skill of the artisan based on the suggest of Asano and Asano. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the groove in the optical disk of either Asano and Asano et al. by selecting the particular frequency range based on the suggest of Asano and Asano et al. in order to easily detect the sinusoidal marks, but avoid the interference with the frequency of data information.

***Response to Arguments***

11. In response to Applicant's arguments filed 02/17/05, Applicant should note that Applicant argues limitations that are not disclosed in the specification. The limitations of "a plurality of the active bits and the inactive bits encodes an information field" or "HFWMs are use to encode an information field" are not disclosed in the specification. Therefore, these limitations cannot be read into the claimed for the purpose of avoiding the prior art, and since these limitations are not read into the claimed invention, Asano, '452 and Asano '722, in individual or combination does show all the limitations as recited in the instant claimed invention.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

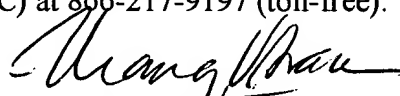
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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thang V. Tran whose telephone number is (571) 272-7595. The examiner can normally be reached on M-F 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thang V. Tran  
Primary Examiner  
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